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| APPLICATION NO.         | F       | ILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO.                      |
|-------------------------|---------|------------|----------------------|-------------------------|---------------------------------------|
| 09/919,591              |         | 08/01/2001 | Ian Bendell          | 076776-0115             | 2579                                  |
| 22428                   | 7590    | 03/12/2003 |                      |                         |                                       |
| FOLEY A                 |         | ONER       | EXAMINER             |                         |                                       |
| SUITE 500<br>3000 K STF | REET NW |            | CIRIC, LJILJANA V    |                         |                                       |
| WASHING                 | TON, DC | 20007      |                      | ART UNIT                | PAPER NUMBER                          |
|                         |         |            |                      | 3743                    | ··· · · · · · · · · · · · · · · · · · |
|                         |         |            |                      | DATE MAILED: 03/12/2003 | ı                                     |

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No. 09/919,591

Applicant(s)

Bendell et al.

Examiner

Ljiljana V. Ciric

Art Unit **3743** 



|                    | The MAILING DATE of this communication appears   | on the cover sheet with the correspondence address                           |
|--------------------|--|--|
| Period fo          |  | ·  |
|                    | PRTENED STATUTORY PERIOD FOR REPLY IS SET  | TO EXPIRE3 MONTH(S) FROM   |
|                    | IAILING DATE OF THIS COMMUNICATION.  | no event, however, may a reply be timely filed after SIX (6) MONTHS from the |
| mailing (          | date of this communication.<br>priod for reply specified above is less than thirty (30) days, a reply within th  |  |
| - If NO pe         | eriod for reply is specified above, the maximum statutory period will apply a  | and will expire SIX (6) MONTHS from the mailing date of this communication.  |
|                    | o reply within the set or extended period for reply will, by statute, cause the<br>ly received by the Office later than three months after the mailing date of the control of |  |
| earned p<br>Status | patent term adjustment. See 37 CFR 1.704(b).   |  |
|                    | Responsive to communication(s) filed on Dec 20, 2  | 2002   |
|                    | This action is <b>FINAL</b> . 2b) X This act   |  |
| 3) 🗆               | Since this application is in condition for allowance of  | except for formal matters, prosecution as to the merits is                   |
|                    | closed in accordance with the practice under Ex pa   |  |
| Dispositi          | on of Claims   | •  |
| 4) 💢               | Claim(s) <u>1-18</u>   | is/are pending in the application.   |
| 48                 | a) Of the above, claim(s) <i>none</i>  | is/are withdrawn from consideration.   |
| 5) 🗆 (             | Claim(s)   | is/are allowed.  |
|                    | Claim(s) <u>1-16 and 18</u>  |  |
|                    | Claim(s) <u>17</u>   |  |
| 8) 🗌 (             | Claims   | are subject to restriction and/or election requirement.                      |
|                    | ion Papers   |  |
| 9) 💢               | The specification is objected to by the Examiner.  |  |
| 10)💢               | The drawing(s) filed on <u>Sep 24, 2002</u> is/are   | a) accepted or b) x objected to by the Examiner.                             |
|                    | Applicant may not request that any objection to the d  | rawing(s) be held in abeyance. See 37 CFR 1.85(a).                           |
| 11)                | The proposed drawing correction filed on   | is: a) □ approved b) □ disapproved by the Examiner.                          |
|                    | If approved, corrected drawings are required in reply  | to this Office action.   |
| 12)                | The oath or declaration is objected to by the Exami  | ner.   |
| Priority ι         | under 35 U.S.C. §§ 119 and 120   |  |
| 13) 💢              | Acknowledgement is made of a claim for foreign pr  | riority under 35 U.S.C. § 119(a)-(d) or (f).                                 |
| a) 💢               | All b)□ Some* c)□ None of:   |  |
| 1                  | . 💢 Certified copies of the priority documents hav   | e been received.   |
| 2                  | . $\square$ Certified copies of the priority documents hav   | e been received in Application No  |
| 3                  | . Copies of the certified copies of the priority de application from the International Bures   | ocuments have been received in this National Stage                           |
| *Se                | e the attached detailed Office action for a list of the  |  |
| 14) 🗌              | Acknowledgement is made of a claim for domestic  | priority under 35 U.S.C. § 119(e).   |
| a) 🗌               | The translation of the foreign language provisiona   | I application has been received.   |
| 15) 🗌 .            | Acknowledgement is made of a claim for domestic  | priority under 35 U.S.C. §§ 120 and/or 121.                                  |
| Attachme           |  |  |
| $\sim$             | ce of References Cited (PTO-892)   | 4) Interview Summary (PTO-413) Paper No(s).                                  |
|                    | ce of Draftsperson's Patent Drawing Review (PTO-948)   | 5) Notice of Informal Patent Application (PTO-152)                           |
| 3) X Info          | mation Disclosure Statement(s) (PTO-1449) Paper No(s)  | 6) Dther:  |

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#### **DETAILED ACTION**

#### Election/Restriction

1. Applicant's election without traverse of the first species or the embodiment of Figure 1 in Paper No. 8 is acknowledged. Since claims 1 through 18 are all readable on the elected species, no claims are currently withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention(s), there being no allowable generic or linking claim.

### **Priority**

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### **Drawings**

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following features must be shown or the feature(s) canceled from the claim(s): the partition separating the first heat exchanger into a left portion and a right portion as recited in claim 9, and the partition separating the first and second heat exchangers into respective left and right portions as recited in claim 10. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

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## Specification

- 4. The abstract of the disclosure is objected to because it it contains grammatical and idiomatic informalities, particularly in the second sentence. It is also objected to because the first sentence, instead of summarizing the characterizing features of the instant invention, describes the known prior art. Correction is required. See MPEP § 608.01(b).
- 5. The disclosure is objected to because of the following informalities: the acronym "PTC" [page 7, paragraph 0016, and other occurrences] is not readily understood and should be replaced with the corresponding art term written out in full.

Appropriate correction is required.

6. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: there appears to be no clear antecedent basis in the specification for the recitation of a "removable cover" [claim 16, line 4] and of a "real temperature control unit" [claim 16, lines 4-5].

## Claim Objections

7. Claim 17 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 17 as written appears to depend from claim 1, yet claim 17

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fails to further limit the subject matter of claim 1, namely the heating and air-conditioning system of claim 1.

8. Claims 10 and 14 are objected to because of the following informalities: "a right portions" [claim 10, line 3] should be replaced with "right portions" or similar as appropriate for improved grammatical correctness; and, the acronym "PTC" [claim 14, line 2] should be replaced with the corresponding art term written out in full for improved readability and clarity. Appropriate correction is required.

# Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1 through 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the limitations following "and selection either" [claim 1, lines 10-11] appear to be incomplete, with one or more words missing therefrom, thus causing these limitations to be generally incomprehensible with regard to the intended scope of protection sought, and also rendering claim 1 and all claims depending therefrom indefinite.

With regard to independent claim 1, it is not clear whether the term "tight/leak-proof manner" is intended to mean "tight or leak-proof manner" or to mean "tight and leak-proof

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manner". Recommend replacing "tight/leak-proof" with "tight or leak-proof" or "tight and leak-proof", as appropriate.

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Claim 2 recites "said motor vehicle" in line 2, yet neither claim 2 nor claim 1 from which claim 1 depends positively recite a motor vehicle; a motor vehicle is only recited as part of an intended use limitation in line 1 of the preamble of base claim 1. Recommend replacing "said motor vehicle" with "the motor vehicle" [claim 2, line 2] in order to avoid confusion with regard to the intended scope of protection sought.

With regard to claim 18 as written, the limitations following "and either" in lines 8-9 of the claim are not clearly set forth as written. In particular, it is not clear which elements are being recited in the alternative; i.e., the "means for selectively attaching to said connecting section" and the releasable cover, or the "means for selectively attaching to said connecting section a releasable cover for covering" and a rear temperature control unit or some other combination of elements. In addition, it appears that a word or words are missing immediately following "means for selectively attaching" since the verb "attaching" requires an object and has none as recited in the claim, thus further rendering the intended scope of protection sought indefinite.

Claim 10 recites "a partition separating said first and second heat exchangers into respective left portions and a right portions"; absent additional clarification by way of the drawings or the originally filed disclosure, it is not clear whether the aforementioned limitations are intended to recite a single partition which runs through both the first and the second heat exchangers and separates each of the heat exchangers into respective left and right portions or

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whether the same limitations are intended to recite two separate partitions, one per heat exchanger, thereby rendering indefinite the metes and bounds of protection sought by the claims.

With regard to claim 11 as written, the limitation "wherein said connecting section is substantially *larger* than said air outlet opening" is not clear as written because it is not clear whether the cross sections or the flow areas or the volumes of the connecting section and the air outlet opening are being compared to each other using the adjective "larger". As written, the size of the three-dimensional connecting section is being compared to the size of the two-dimensional air outlet opening.

Finally, it is not clear, upon a reading of the originally filed disclosure, which particular element(s) and equivalents thereof correspond to the recitation of the "means for selectively attaching" as recited in claim 18. With regard to the latter, applicant is reminded that although 35 U.S.C. 112, sixth paragraph, statutorily provides that one may use means-plus-function language in a claim, one is still subject to the requirement that a claim particularly point out and distinctly claim the invention. Therefore, if one employs means-plus-function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. See *Donaldson*, 16 F.3d at 1195, 29 USPQ2d at 1850; see also *B. Braun Medical, Inc. v. Abbott Lab.*, 124 F.3d 942, 946, 42 USPQ 2d 1881, 1884085 (Fed. Cir. 1997).

There is insufficient antecedent basis in the claims for the following limitations in the claims: "said removable cover" [claim 16, line 4]; and, "said real temperature control unit" [claim 16, lines 4-5].

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The above is an indicative, but not necessarily an exhaustive, list of 35 U.S.C. 112, second paragraph, problems. Applicant is therefore advised to carefully review all of the claims for additional problems. Correction is required of all of the 35 U.S.C. 112, second paragraph problems, whether or not these were particularly pointed out above.

#### Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 12. As best can be understood in view of the indefiniteness of the claims, claims 1 through 5, 12, 13, 15, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by *Danieau ('160, of record)*.

Danieau discloses a vehicular HVAC system essentially as claimed, including: a first heat exchanger or heating radiator 106 operably integrated within the housing 12; a plurality of air outlet openings 110, 114, and 118 in the housing 12; a connecting section or attachment surface 124 on the outside of the housing 12; an air outlet 122 opening through the connecting section or attachment surface 124; a rear temperature control unit 164 [Figures 8 and 14; column 6, lines 46-55] attached to the the connecting section and in fluid communication with the housing 12 via the air outlet 166; and, air flaps 30, 32, and 108 for regulating the flow of air through the first heat exchanger or heating radiator 106.

The reference thus reads on the claims.

13. Alternately for claims 1 through 5, 12, 13, 15, and 18, and as best can be understood in view of the indefiniteness of the claims, claims 1 through 6, 9, 12, 14, 15, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by *Umebayahi et al.* 

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Umebayahi et al. discloses a vehicular HVAC system essentially as claimed, including: a conditioning housing or case 31; a first heat exchanger 33 operably integrated within conditioning housing or case 31, the first heat exchanger 33 comprising a plurality of electrically activated heating elements 51 integrated in the first heat exchanger 33 for water side temperature regulation; a plurality of air outlet openings 42 and 43 in the conditioning housing or case 31; and, air flaps or mixing doors 36 and 37 for regulating the flow of air through the first heat exchanger 33. That portion of the housing or case 31 which encompasses warm air passage 46 and rear foot opening 50 as shown in Figure 1 of Umebayahi et al. reads broadly on the rear temperature control unit and "additional housing" as recited in the claims of the instant invention, whereas warm air bypass door 41 reads on the air control element recited in claim 6 of the instant invention. Any one of heating elements 51 as shown in Figure 3 of Umebayahi et al. reads broadly on the partition as recited in claim 9 of the instant invention.

The reference thus reads on the claims.

NOTE: Applicant cannot rely upon the foreign priority papers to overcome the above rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

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14. Alternately for claims 1 through 6, 12, and 18, and as best can be understood in view of the indefiniteness of the claims, claims 1 through 8, 12, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by *Umebayahi et al.* 

Umebayahi et al. discloses a vehicular HVAC system essentially as claimed, including: a conditioning housing or case 31; a first heat exchanger 32 operably integrated within conditioning housing or case 31; and, a plurality of air outlet openings 42 and 43 in the conditioning housing or case 31. That portion of the housing or case 31 which is to the right of the pivots for mixing doors 36 and 37 and of mode switching door 49, and which encompasses warm air passage 46 and rear foot opening 50 as shown in Figure 1 of *Umebayahi et al.*, reads very broadly on the rear temperature control unit and additional housing as recited in claims 5 through 8 of the instant invention. Meanwhile, heater core 33 reads on the second heat exchanger operably integrated within the additional housing as recited in claims 7 and 8 of the instant invention, whereas warm air bypass door 41 reads on the air control element recited in each of claims 6 and 8 of the instant invention.

The reference thus reads on the claims.

NOTE: Applicant cannot rely upon the foreign priority papers to overcome the above rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

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15. The non-application of art against claims 10, 11, and 16 should not be construed as an

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indication that the claims contain allowable subject matter but rather that the claims could not be

examined on the merits due to indefiniteness.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. Danieau ('274), Saida et al., Ito et al., Tabara, and Uemura et al. each discloses a

vehicular air conditioner with multi-part casings or housings and/or with rear temperature control

units. Pierron et al. shows a partitioned vehicular radiator.

17. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Ljiljana (Lil) V. Ciric, whose telephone number is (703) 308-3925. While

she works a flexible schedule that varies from day to day and from week to week, Examiner Ciric

may generally be reached at the Office during the work week between the hours of 10 a.m. and 6

p.m. ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Henry Bennett, can be reached on (703) 308-0101. The fax phone number is (703) 305-3463.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the Group receptionist whose telephone number is (703) 308-0861.

lvc

March 4, 2003

LILIANA CIRIC

PATENT EXAMINER